

In the Claims

Please amend Claims 1, 5-11, 22, and 26-33; add Claims 45-52, and cancel Claims 12 and 14-21, all as shown below. Applicant respectfully reserves the right to prosecute any originally presented claims in a continuing or future application.

1. (Currently Amended) An interactive tool for viewing and manipulating a virtual content repository (VCR) having an application program interface (API), comprising:

providing a first graphical user interface (GUI), having a navigation pane and an editor window, configured to present a hierarchical namespace, shown in the navigation pane, that spans information in a plurality of content repositories represented by the virtual content repository, wherein the namespace includes at least one element, and wherein one of the at least one element can be selected;

~~providing a second GUI displaying a content editor in the editor window when a content mode is selected in the navigation pane wherein the content editor is configured to present and to enable editing of content associated with the selected element in the first GUI navigation pane;~~

~~providing a third GUI displaying a schema editor in the editor window when a type mode is selected in the navigation pane wherein the schema editor is configured to present and to enable editing of schema associated with the selected element in the first GUI navigation pane;~~
[[and]]

wherein the VCR logically represents the plurality of content repositories as a single content repository;

wherein each one of the plurality of content repositories represented by the VCR ~~includes~~ implements a different service provider interface (SPI) compatible with the API, wherein each SPI and the API share a content model, and wherein each SPI maps operations on the content model to operations on the content repository implementing that SPI; and

wherein the SPI enables each one of the plurality of content repositories to ~~be integrated~~ plug into the VCR.

2. (Canceled)

3. (Previously Presented) The interactive tool of claim 1 wherein:

an element can be one of: 1) a federated root; 2) a content repository; 3) a hierarchy node; 4) a content node; 5) a schema node; 6) a hierarchy node having a schema; and 7) a content node having a schema.

4. (Canceled)
5. (Currently Amended) The interactive tool of claim 1 wherein:
the ~~first GUI~~ navigation pane presents the namespace as a tree.
6. (Currently Amended) The interactive tool of claim 3 wherein:
the ~~first GUI~~ navigation pane can selectively present nodes having only content or schemas.
7. (Currently Amended) The interactive tool of claim 1 wherein:
the ~~second GUI~~ content editor ~~can~~ presents all properties and values associated with the selected element ~~in the first GUI~~.
8. (Currently Amended) The interactive tool of claim 1 wherein:
the ~~third GUI~~ schema editor can present all property attributes associated with the selected element ~~in the first GUI~~.
9. (Currently Amended) The interactive tool of claim 1 wherein:
the ~~first GUI~~ navigation pane allows elements to be moved, copied and deleted from the namespace.
10. (Currently Amended) The interactive tool of claim 1 wherein:
selection of an element in the ~~first GUI~~ navigation pane causes the presentation of the ~~second GUI or the third GUI~~ content editor or schema editor.
11. (Currently Amended) The interactive tool of claim 1, further comprising:
providing a ~~fourth GUI~~ repository configuration editor configured to present and to enable editing of configuration parameters associated with a ~~selected~~ content repository or root node selected in the ~~first GUI~~ navigation pane.

12. (Canceled)

13. (Canceled)

14-21. (Canceled)

22. (Currently Amended) A machine readable medium having instructions stored thereon that when executed by a processor cause a system to:

provide a first graphical user interface (GUI), having a navigation pane and an editor window, configured to present a hierarchical namespace, shown in the navigation pane, that spans information in a plurality of content repositories represented by a virtual content repository (VCR), wherein the namespace includes at least one element, and wherein one of the at least one element can be selected;

~~provide a second GUI~~ display a content editor in the editor window when a content mode is selected in the navigation pane wherein the content editor is configured to present and to enable editing of content associated with the selected element in the first GUI navigation pane;

~~provide a third GUI~~ display a schema editor in the editor window when a type mode is selected in the navigation pane wherein the schema editor is configured to present and to enable editing of schema associated with the selected element in the first GUI navigation pane;
[[and]]

wherein the VCR logically represents the plurality of content repositories as a single content repository;

wherein each one of the plurality of content repositories represented by the VCR ~~includes~~ implements a different service provider interface (SPI) compatible with the API, wherein each SPI and the API share a content model, and wherein each SPI maps operations on the content model to operations on the content repository implementing that SPI; and

wherein the SPI enables each one of the plurality of content repositories to be integrated into the VCR.

23. (Canceled)

24. (Previously Presented) The machine readable medium of claim 22 wherein:

an element can be one of: 1) a federated root; 2) a content repository; 3) a hierarchy node; 4) a content node; 5) a schema node; 6) a hierarchy node having a schema; and 7) a content node having a schema.

25. (Canceled)

26. (Currently Amended) The machine readable medium of claim 22 wherein:
the ~~first GUI~~ navigation pane presents the namespace as a tree.

27. (Currently Amended) The machine readable medium of claim 24 wherein:
the ~~first GUI~~ navigation pane can selectively present nodes having only content or schemas.

28. (Currently Amended) The machine readable medium of claim 22 wherein:
the ~~second GUI~~ content editor can presents all properties and values associated with the selected element ~~in the first GUI~~.

29. (Currently Amended) The machine readable medium of claim 22 wherein:
the ~~third GUI~~ schema editor can present all property attributes associated with the selected element ~~in the first GUI~~.

30. (Currently Amended) The machine readable medium of claim 22 wherein:
the ~~first GUI~~ navigation pane allows elements to be moved, copied and deleted from the namespace.

31. (Currently Amended) The machine readable medium of claim 22 wherein:
selection of an element in the ~~first GUI~~ navigation pane causes the presentation of the ~~second GUI or the third GUI~~ content editor or schema editor.

32. (Currently Amended) The machine readable medium of claim 22, further comprising instructions that when executed cause the system to:
provide a ~~fourth GUI~~ repository configuration editor configured to present and to enable editing of configuration parameters associated with a ~~selected~~ content repository or root node selected in the ~~first GUI~~ navigation pane.

33. (Currently Amended) A system for viewing and manipulating a virtual content repository (VCR) having an application program interface (API), comprising:

a means for providing a first graphical user interface (GUI), having a navigation pane and an editor window, configured to present a hierarchical namespace, shown in the navigation pane, that spans a plurality of content repositories represented by the virtual content repository, wherein the namespace includes at least one element, and wherein one of the at least one element can be selected;

a means for ~~providing a second GUI~~ displaying a content editor in the editor window when a content mode is selected in the navigation pane wherein the content editor is configured to present and to enable editing of content associated with the selected element in the first GUI navigation pane;

a means for ~~providing a third GUI~~ displaying a schema editor in the editor window when a type mode is selected in the navigation pane wherein the schema editor is configured to present and to enable editing of schema associated with the selected element in the first GUI navigation pane; [[and]]

wherein the VCR logically represents the plurality of content repositories as a single content repository;

wherein each one of the plurality of content repositories represented by the VCR ~~includes~~ implements a different service provider interface (SPI) compatible with the API, wherein each SPI and the API share a content model, and wherein each SPI maps operations on the content model to operations on the content repository implementing that SPI; and

wherein the SPI enables each one of the plurality of content repositories to be integrated into the VCR.

34-44. (Canceled)

45. (New) A web portal for viewing and manipulating a virtual content repository (VCR) having an application program interface (API), comprising:

a navigation pane, having a plurality of selectable modes, configured to present a hierarchical namespace that spans information in a plurality of content repositories represented by the virtual content repository, wherein the namespace includes at least one element, and wherein one of the at least one element can be selected;

an editor window configured to present and to enable editing of information associated with the selected element in the navigation pane;

a content mode in the plurality of selectable modes, wherein when the content mode is selected the navigation pane shows only elements in the namespace that include content and the editor window presents and enables editing of content information associated with the selected element in the navigation pane;

a type mode in the plurality of modes, wherein when the type mode is selected the navigation pane shows only elements that include only schemas and the editor window presents and enables editing of schema information associated with the selected element in the navigation pane;

wherein the VCR logically represents the plurality of content repositories as a single content repository;

wherein each one of the plurality of content repositories represented by the VCR implements a different service provider interface (SPI) compatible with the API, wherein each SPI and the API share a content model, and wherein each SPI maps operations on the content model to operations on the content repository implementing that SPI; and

wherein the SPI enables each one of the plurality of content repositories to plug into the VCR.

46. (New) The web portal of claim 45, wherein a repository configuration editor configured to present and to enable editing of configuration parameters associated with a content repository is shown in the editor window when the content repository is selected in the navigation pane.

47. (New) The web portal of claim 45, wherein when a schema property is selected while the web portal is in type mode a property editor is shown in the editor window and wherein the property editor is configured to present and to enable editing of property attributes associated with a selected schema.

48. (New) The web portal of claim 45 wherein:

an element can be one of: 1) a federated root; 2) a content repository; 3) a hierarchy node; 4) a content node; 5) a schema node; 6) a hierarchy node having a schema; and 7) a content node having a schema.

49. (New) The web portal of claim 45 wherein:
the navigation pane presents the namespace as a tree.
50. (New) The web portal of claim 45 wherein:
the content editor presents all properties and values associated with the selected element.
51. (New) The web portal of claim 45 wherein:
the schema editor can present all property attributes associated with the selected element.
52. (New) The web portal of claim 45 wherein:
the navigation pane allows elements to be moved, copied and deleted from the namespace.